

the numerous other problematic timber species in tropical forests. Let Oscar (Escuela de Biología, Universidad de Costa Rica, Ciudad Universitaria, COSTA RICA) or me know if we can provide any additional information about this.

Best regards,


Deborah A. Clark

Co-Director
La Selva Biological Station

cc. O. Rocha


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Dr. Joshua Lederberg
The Rockefeller University
1230 York Avenue
New York, New York 10021-6399

Dear Dr. Lederberg:

I enjoyed your follow-up note to Dr. Clark (female), and was pleased to hear you enjoyed the La Selva visit.

Re the need for research on propagation techniques for *Terminalia oblonga* - yes, any leads/ideas about how to approach the problem, funding sources, etc., would be greatly appreciated. As I mentioned when you were here, this species produces highly valued timber (e.g., beautiful flooring). It has not been included in any reforestation projects in Costa Rica due to its lack of viable seed crops (the abundant fruits are nearly totally lacking in viable seeds). The cause of this isn't known - could be genetic impoverishment due to forest fragmentation and/or very effective seed predators. Mycorrhizae could well play a role in the overall performance of the species (another poorly studied issue re tropical trees), but are unlikely to be directly connected to the seed viability problem.

I waited to respond to your note until I had a chance to check with a Costa Rican researcher who's already expressed interest in this problem. Dr. Oscar Rocha is a new professor at the Department of Biology of the University of Costa Rica with particular interest in developing a research program on issues related to reproduction and genetics of native timber species. His doctoral work while a Fulbright fellow at Penn. State was on issues of gamete and seed competition in fruits. In the last year Oscar has been laying the groundwork for collaborative work in micropropagation techniques for timber trees, with Dr. Hector Flores, a specialist in plant biotechnology at Penn. State.

Oscar just returned a few days ago from a two month trip to molecular biology and biotechnology labs in Mexico, and I was able to talk with him this morning. He continues to be very interested in developing a project with *Terminalia* and other "recalcitrant" native timber trees, and would greatly appreciate any suggestions you might have re funding sources or strategies for this type of research.

Oscar and I are very interested in seeing this line of research get going. At the same time that it addresses a concrete problem involving a valuable timber species, it could also serve as a model for studies of